

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixture  
Product name : Lockfast R20  
UFI : 3220-108E-Q00E-9K40  
Type of product : adhesives  
Product group : Adhesives, sealants

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Intended for general public  
Main use category : Industrial use, Professional use, Consumer use  
Function or use category : Adhesives, binding agents

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

**Cyanotec Ltd**  
Bay 2 Building 62, Third Avenue,  
Pensnett Trading Estate,  
Kingswinford,  
West Midlands DY6 7XT United Kingdom

Tel: +44 (0)1384 294753  
Email: sales@cyanotec.com

### 1.4. Emergency telephone number

Emergency number : +44 (0) 1384 294753 (Monday - Thursday 9:00 to 17:00)  
IN CASE OF TOXIC OR TRANSPORT EMERGENCY:  
National Chemical Emergency Centre: Telephone 01865 407333

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2 H319  
Skin sensitisation, Category 1 H317  
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H335  
Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411  
Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07

GHS09

Signal word (CLP)

: Warning

Contains

: HYDROQUINONE MONOMETHYL ETHER, 1,1'-(METHYLENEDI-P-PHENYLENE) BISMALEIMIDE, 2,2'(4-METHYLPHENYLIMINO)DIETHANOL, 1-ACETYL-2-PHENYLHYDRAZINE, CUMENE HYDROPEROXIDE

Hazard statements (CLP)

: H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P312 - Call a POISON CENTRE or doctor if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P391 - Collect spillage.

EUH-statements

: EUH208 - Contains HYDROQUINONE MONOMETHYL ETHER(150-76-5), 1,1'-(METHYLENEDI-P-PHENYLENE) BISMALEIMIDE(13676-54-5), 2,2'(4-METHYLPHENYLIMINO)DIETHANOL(3077-12-1), 1-ACETYL-2-PHENYLHYDRAZINE(114-83-0). May produce an allergic reaction.

### 2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,1'-(METHYLENEDI-P-PHENYLENE) BISMALEIMIDE	CAS-No.: 13676-54-5 EC-No.: 237-163-4	10 – 25	Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Chronic 1, H410
CUMENE HYDROPEROXIDE	CAS-No.: 80-15-9 EC-No.: 201-254-7 EC Index-No.: 617-002-00-8 REACH-no: 01-2119475796-19	0.5 – 2.5	Org. Perox. E, H242 Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 STOT RE 2, H373 Skin Corr. 1B, H314 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
HYDROQUINONE MONOMETHYL ETHER	CAS-No.: 150-76-5 EC-No.: 205-769-8 EC Index-No.: 604-044-00-7 REACH-no: 01-2119541813-40	0.1 – 1	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1, H317
N,N-DIMETHYL-P-TOLUIDINE	CAS-No.: 99-97-8 EC-No.: 202-805-4 EC Index-No.: 612-056-00-9 REACH-no: 01-2119937766-23	0.1 – 1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT RE 2, H373 Aquatic Chronic 3, H412
2,2'(4-METHYLPHENYLIMINO)DIETHANOL	CAS-No.: 3077-12-1 EC-No.: 221-359-1	0.1 – 1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
1-ACETYL-2-PHENYLHYDRAZINE	CAS-No.: 114-83-0	0.1 – 1	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
CUMENE HYDROPEROXIDE	CAS-No.: 80-15-9 EC-No.: 201-254-7 EC Index-No.: 617-002-00-8 REACH-no: 01-2119475796-19	( 0 <C < 10) STOT SE 3, H335 ( 1 ≤C < 3) Eye Irrit. 2, H319 ( 3 ≤C < 10) Skin Irrit. 2, H315 ( 3 ≤C < 10) Eye Dam. 1, H318 ( 10 ≤C ≤ 100) Skin Corr. 1B, H314

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.  
Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

#### 5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

##### 6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Ventilate area. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.  
Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.  
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.  
Incompatible products : Oxidizing agent.

#### 7.3. Specific end use(s)

adhesives.

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

HYDROQUINONE MONOMETHYL ETHER (150-76-5)	
<b>Belgium - Occupational Exposure Limits</b>	
Local name	4-Méthoxyphénol # 4-Methoxyfenol
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
<b>Denmark - Occupational Exposure Limits</b>	
Local name	4-Methoxyphenol (4-Hydroxyanisol)
OEL TWA [1]	5 mg/m <sup>3</sup>
Regulatory reference	BEK nr 2203 af 29. november 2021
<b>France - Occupational Exposure Limits</b>	
Local name	4-Méthoxyphénol
VME (OEL TWA)	5 mg/m <sup>3</sup>
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
<b>Greece - Occupational Exposure Limits</b>	
Local name	Μεθοξυφαινόλη, 4-
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
<b>Ireland - Occupational Exposure Limits</b>	
Local name	4-Methoxyphenol [Mequinol]
OEL TWA [1]	5 mg/m <sup>3</sup>
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Poland - Occupational Exposure Limits</b>	
Local name	4-Metoksyfenol
NDS (OEL TWA)	5 mg/m <sup>3</sup>
Remark	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową).
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Portugal - Occupational Exposure Limits</b>	
Local name	4-Metoxifenol
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>Slovenia - Occupational Exposure Limits</b>	
Local name	mekinol (4-metoksifenol)
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021

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HYDROQUINONE MONOMETHYL ETHER (150-76-5)	
<b>Spain - Occupational Exposure Limits</b>	
Local name	4-Metoxifenol
VLA-ED (OEL TWA) [1]	5 mg/m <sup>3</sup>
Remark	Sen (Sensibilizante).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT
<b>Iceland - Occupational Exposure Limits</b>	
Local name	4-Metoxýfenól (4-hýdroxýanisól)
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
<b>Norway - Occupational Exposure Limits</b>	
Local name	4-metoksyfenol
Grønseverdi (OEL TWA) [1]	5 mg/m <sup>3</sup>
Regulatory reference	FOR-2021-06-28-2248
<b>CUMENE HYDROPEROXIDE (80-15-9)</b>	
<b>Latvia - Occupational Exposure Limits</b>	
Local name	2-Fenil-2-propilhidroperoksīds (Kumolhidroperoksīds, kumola hidroperoksīds, kumilhidroperoksīds, izopropilbenzola hidroperoksīds, α,α dimetilbenzilhidroperoksīds)
OEL TWA	1 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	Kumoleno (izopropilbenzeno) hidroperoksidas
IPRV (OEL TWA)	1 mg/m <sup>3</sup>
Remark	O (medžiaga į organizmą gali prasiskverbti pro nepažeistą odą)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
<b>Switzerland - Occupational Exposure Limits</b>	
Local name	Hydroperoxyde de α,α-diméthylbenzyle / α,α-Dimethylbenzylhydroperoxid [Cumolhydroperoxid]
Remark	OSHA
Regulatory reference	www.suva.ch, 28.03.2022

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

HYDROQUINONE MONOMETHYL ETHER (150-76-5)	
<b>DNEL/DMEL (Workers)</b>	
Acute - systemic effects, inhalation	10 mg/m <sup>3</sup>
Long-term - systemic effects, inhalation	3 mg/m <sup>3</sup>

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<b>HYDROQUINONE MONOMETHYL ETHER (150-76-5)</b>	
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.0136 mg/l
PNEC aqua (marine water)	0.00136 mg/l
PNEC aqua (intermittent, freshwater)	0.03 mg/l
PNEC aqua (intermittent, marine water)	0.003 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	0.125 mg/kg dwt
PNEC sediment (marine water)	0.0125 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0.017 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	10 mg/l
<b>1,1'-(METHYLENEDI-P-PHENYLENE) BISMALIMIDE (13676-54-5)</b>	
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.4 µg/l
PNEC aqua (marine water)	0.04 µg/l
PNEC aqua (intermittent, freshwater)	0.994 µg/l
PNEC aqua (intermittent, marine water)	0.994 µg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	0.041 mg/kg dwt
PNEC sediment (marine water)	0.0041 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	8.05 µg/kg dw
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	3 mg/l
<b>2,2'(4-METHYLPHENYLIMINO)DIETHANOL (3077-12-1)</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	0.47 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3.29 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	0.16 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.58 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.17 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.0264 mg/l
PNEC aqua (marine water)	0.00264 mg/l
PNEC aqua (intermittent, freshwater)	0.26 mg/l
PNEC aqua (intermittent, marine water)	0.0264 mg/l

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2,2'(4-METHYLPHENYLIMINO)DIETHANOL (3077-12-1)	
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	0.1214 mg/kg dwt
PNEC sediment (marine water)	0.0121 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0.0088 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	10 mg/l
CUMENE HYDROPEROXIDE (80-15-9)	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, inhalation	6 mg/m <sup>3</sup>
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.0031 mg/l
PNEC aqua (marine water)	0.00031 mg/l
PNEC aqua (intermittent, freshwater)	0.031 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	0.023 mg/kg dwt
PNEC sediment (marine water)	0.0023 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0.0029 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	0.35 mg/l

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses		With side shields	EN 166



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### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

Skin and body protection	
Type	Standard
Protective clothing	EN 14605

#### Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)		≥0.4 mm		EN ISO 374

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
Full face mask	Filter A1/B1, Type A - High-boiling (>65 °C) organic compounds		EN 14387

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Green.
Odour	: Characteristic odour.
Odour threshold	: Not available
Melting point	: No data available.
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 93 °C
Auto-ignition temperature	: No data available.
Decomposition temperature	: Not available
pH	: Not applicable.
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 5000 – 12000 mPa.s at 25°C
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available

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Density	: Not available
Relative density	: 1.05
Relative vapour density at 20 °C	: No data available.
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### HYDROQUINONE MONOMETHYL ETHER (150-76-5)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: other:OECD No 423 Acute Oral Toxicity – Acute Toxic Class Method

#### 1,1'-(METHYLENEDI-P-PHENYLENE) BISMALIMIDE (13676-54-5)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity), Guideline: other:
LC50 Inhalation - Rat	0.515 – 1 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)

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<b>N,N-DIMETHYL-P-TOLUIDINE (99-97-8)</b>	
LD50 oral rat	1650 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	139 mg/kg bodyweight Animal: mouse, Guideline: other:
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
LC50 Inhalation - Rat	1.4 mg/l air Animal: rat, Guideline: other:
<b>2,2'(4-METHYLPHENYLIMINO)DIETHANOL (3077-12-1)</b>	
LD50 oral rat	959 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:
<b>CUMENE HYDROPEROXIDE (80-15-9)</b>	
LC50 Inhalation - Rat [ppm]	220 ppm Animal: rat, Animal sex: male
Skin corrosion/irritation	: Not classified pH: Not applicable.
<b>N,N-DIMETHYL-P-TOLUIDINE (99-97-8)</b>	
pH	7.44 Temp.: 25 °C Concentration: 1 vol%
Serious eye damage/irritation	: Causes serious eye irritation. pH: Not applicable.
<b>N,N-DIMETHYL-P-TOLUIDINE (99-97-8)</b>	
pH	7.44 Temp.: 25 °C Concentration: 1 vol%
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
<b>1-ACETYL-2-PHENYLHYDRAZINE (114-83-0)</b>	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
<b>HYDROQUINONE MONOMETHYL ETHER (150-76-5)</b>	
LOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:EPA OPPTS 870.3650 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:EPA OPPTS 870.3650 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
<b>1,1'-(METHYLENEDI-P-PHENYLENE) BISMALIMIDE (13676-54-5)</b>	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
<b>N,N-DIMETHYL-P-TOLUIDINE (99-97-8)</b>	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

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<b>2,2'(4-METHYLPHENYLIMINO)DIETHANOL (3077-12-1)</b>	
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral)), Guideline: other:

<b>CUMENE HYDROPEROXIDE (80-15-9)</b>	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

<b>N,N-DIMETHYL-P-TOLUIDINE (99-97-8)</b>	
Viscosity, kinematic	16.364 mm <sup>2</sup> /s

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

#### 11.2.2. Other information

Potential adverse human health effects and symptoms : No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.  
Not rapidly degradable

<b>HYDROQUINONE MONOMETHYL ETHER (150-76-5)</b>	
LC50 - Fish [1]	28.5 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	3 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	54.7 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	19 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	> 1.45 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.68 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

<b>1,1'-(METHYLENEDI-P-PHENYLENE) BISMALIMIDE (13676-54-5)</b>	
LC50 - Fish [1]	> 145 µg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 99.4 µg/l Test organisms (species): Daphnia magna

<b>N,N-DIMETHYL-P-TOLUIDINE (99-97-8)</b>	
LC50 - Fish [1]	46 mg/l Test organisms (species): Pimephales promelas
EC50 72h - Algae [1]	2437002 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

<b>2,2'(4-METHYLPHENYLIMINO)DIETHANOL (3077-12-1)</b>	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Cyprinus carpio

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### 2,2'(4-METHYLPHENYLIMINO)DIETHANOL (3077-12-1)

EC50 - Crustacea [1]	48 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

### CUMENE HYDROPEROXIDE (80-15-9)

LC50 - Fish [1]	3.9 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	18.84 mg/l Test organisms (species): Daphnia magna

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW) code	: 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances

## SECTION 14: Transport information

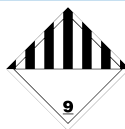




In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
<b>14.2. UN proper shipping name</b>				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

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ADR	IMDG	IATA	ADN	RID
<b>Transport document description</b>				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
<b>14.3. Transport hazard class(es)</b>				
9	9	9	9	9
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	: 
Tunnel restriction code (ADR)	: -
EAC code	: •3Z

#### Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03

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Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

### Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L

### Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

### Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	CUMENE HYDROPEROXIDE
3(b)	Lockfast R20 ; N,N-DIMETHYL-P-TOLUIDINE ; CUMENE HYDROPEROXIDE

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### EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(c)	Lockfast R20 ; N,N-DIMETHYL-P-TOLUIDINE ; CUMENE HYDROPEROXIDE

### REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

### REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

### POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

## 15.1.2. National regulations

### France

#### Occupational diseases

Code	Description
RG 65	Eczematiform lesions of allergic mechanism

### Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

### Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

### Switzerland

Storage class (LK) : LK 10/12 - Liquids

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out



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### SECTION 16: Other information

#### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

#### Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
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Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
EUH208	Contains HYDROQUINONE MONOMETHYL ETHER(150-76-5), 1,1'-(METHYLENEDI-P-PHENYLENE) BISMALIMIDE(13676-54-5), 2,2'(4-METHYLPHENYLIMINO)DIETHANOL(3077-12-1), 1-ACETYL-2-PHENYLHYDRAZINE(114-83-0). May produce an allergic reaction.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H242	Heating may cause a fire.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Org. Perox. E	Organic Peroxides, Type E
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.